## IN THE CLAIMS

1. (currently amended) A compound with the following formula:

wherein:

$$A = R_1 \frac{1}{R_2}$$

or

or

$$R_1$$
  $R_2$   $N$ 

or

or

 $R_1$  and  $R_2$  may be the same or different and are [[=]] H, -CH<sub>3</sub>, -CH(CH<sub>3</sub>)<sub>2</sub>, -OCH<sub>3</sub>, - Cl, -CF<sub>3</sub>, -OCF<sub>3</sub>, or -SCH<sub>3</sub>;

 $R_3$  is [[=]] an amino acid radical hydrolysable by a carboxypeptidase A; and  $R_4$  is [[=]] a basic amino acid radical.

2. (currently amended) A compound according to claim 1, wherein:

R<sub>3</sub> is [[=]] a hydrophobic amino acid radical; and

R<sub>4</sub> is [[=]] an arginine or lysine radical.

- 3. (currently amended) A compound according to claim 1 wherein  $R_1$  is [[=]] H and  $R_2$  is [[=]] -S-CH<sub>3</sub>.
- 4. (previously presented) A compound according to claim 1 wherein  $R_3$  is selected from the group consisting of:

tyrosine;

phenylalanine;

alanine;

valine;

leucine;

isoleucine; and

phenylglycine.

- 5. (previously presented) A compound according to claim 1 wherein  $R_3$  is phenylalanine.
- 6. (previously presented) A compound according to claim 1 wherein R<sub>3</sub> is phenylalanine or tyrosine and R<sub>4</sub> is arginine or lysine.
  - 7. (previously presented) A compound according to claim 1 wherein  $R_3$  is tyrosine.
- 8. (previously presented) A compound according to claim 1, wherein  $R_1$  is selected from the group consisting of: -H and -CH<sub>3</sub>, and  $R_2$  is selected from the group consisting of CH<sub>3</sub>, O-CH<sub>3</sub> and -S-CH<sub>3</sub>.

9. (currently amended) A compound according to claim 1, wherein A is:

$$R_1$$
  $R_2$ 

10. (previously presented) A compound according to claim 1 wherein:

$$A = R_1$$

and wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  are:

wherein the numbers designated with an asterix determine the position of the methyl groups on the phenyl radical.

11. (previously presented) A compound according to claim 1, wherein said compound is 4-methylthiophenylazoformyltyrosine arginine.

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- 12. (currently amended) A method for assaying the activity of a carboxypeptidase N or a carboxypeptidase U in a biological sample, in which:
  - said sample is brought into contact with a compound with of the formula (I) according to claim 1, and with a carboxypeptidase A, under\_conditions that allow hydrolysis of the sample; and
  - the reduction in coloration of the sample containing the substrate with of the formula (I) and carboxypeptidase A is measured, resulting from double hydrolysis of the substrate withof the formula (I) by the CPN or CPU of the sample and by CPA.
- 13. (currently amended) A method according to claim 12, eharacterized in that wherein  $R_1$  [[=]] is H and  $R_2$  [[=]] is -S-CH<sub>3</sub>.
- 14. (currently amended) A method according to claim 12, <del>characterized in that</del> wherein R<sub>4</sub> is an arginine or lysine radical.
- 15. (currently amended) A method according to claim 12, eharacterized in that wherein the substrate is a compound withof the formula (I) in which R<sub>3</sub> is selected from the following amino acid radicals:
  - tyrosine:
  - phenylalanine;
  - alanine;
  - valine;
  - leucine;
  - isoleucine; and
  - phenylglycine.
- 16. (currently amended) A method according to claim 12, <del>characterized in that</del> wherein R<sub>3</sub> is tyrosine.
- 17. (currently amended) A method according to claim 12, eharacterized in that wherein the substrate is a compound withof the formula (I), in which R<sub>3</sub> represents phenylalanine.

- 18. (currently amended) A method according to claim 12, characterized in that wherein the substrate is a compound with of the formula (I) in which R<sub>3</sub> represents phenylalanine and R<sub>4</sub> represents arginine or lysine.
- 19. (currently amended) A method according to claim 12, <del>characterized in-that</del> wherein the substrate is a compound with-of the formula (I) in which R<sub>1</sub> is selected from -H and -CH<sub>3</sub>, and R<sub>2</sub> is selected from CH<sub>3</sub>, O-CH<sub>3</sub> and -S-CH<sub>3</sub>.
- 20. (currently amended) A method according to claim 12, characterized in that wherein the substrate is a compound with of the formula (I) in which:

in which:

- $R_1, R_2 = H, -CH_3, -CH(CH_3)_2, -OCH_3, -Cl, -CF_3, -OCF_3, -SCH_3;$
- $R_3$  = an amino acid radical hydrolysable by a carboxypeptidase A;
- $R_4 = a$  basic amino acid radical.
- 21. (currently amended) A method according to claim—21 characterized in that 12, wherein the substrate is a compound with of the formula (I) in which:

said compound being selected from the group constituted by the following compounds:

$$R_{1} = -CH_{3} \ _{(2)}. \qquad R_{2} = -CH_{3} \ _{(4)}. \qquad R_{3} = -CH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ R_{1} = -CH_{3} \ _{(2)}. \qquad R_{2} = -CH_{3} \ _{(5)}. \qquad R_{3} = -CH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ R_{1} = -H \qquad R_{2} = -O - CH_{3} \qquad R_{3} = -CH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ R_{1} = -H \qquad R_{2} = -CH_{3} \qquad R_{3} = -CH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ R_{1} = -H \qquad R_{2} = -CH_{3} \longrightarrow \qquad R_{3} = -CH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ R_{1} = -H \qquad R_{2} = -CH_{3} \longrightarrow \qquad R_{3} = -CH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} = -(CH_{2})_{3} - NH - C NH \\ NH_{2} \longrightarrow \qquad R_{4} \longrightarrow \qquad R_$$

- \*the numbers in brackets determining the position of the methyl groups on the phenyl radical.
- 22. (currently amended) A method according to claim 12, in which the compound with of the formula (I) is 4-MTPAFYR (4-methylthiophenylazoformyltyrosine arginine).
- 23. (currently amended) A method according to claim 12, eharacterized in that wherein the optical density of the mixture is measured without adding CPA, then after adding CPA.
- 24. (currently amended) A method according to claim 12, <del>characterized in thatwherein</del> the measured decrease in coloration is compared with values on a calibration curve.
- 25. (currently amended) A method according to claim 12, <del>characterized in that</del> wherein the sample is a blood sample.

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- 26. (currently amended) A method according to claim 25, <del>characterized in that</del> wherein the sample is plasma.
- 27. (currently amended) A method according to claim 12, <del>characterized in that</del> wherein the CPA is pancreatic CPA.
- 28. (currently amended) A method according to claim 12, eharacterized in that wherein the test sample is brought into the presence of an activator buffer for the time necessary to obtain activation of the carboxypeptidase U the activity of which is to be measured, then into the presence of a protease serine inhibitor.
- 29. (currently amended) A method according to claim 28, <del>characterized in that</del> wherein the substrate withof the formula (I) is added at the same time as the activator buffer, or simultaneously or immediately after the serine protease inhibitor.
- 30. (currently amended) A method according to claim 28, <del>characterized in that</del> wherein activation is carried out using the thrombin/thrombomodulin complex route.
- 31. (currently amended) A method for assaying the activity of the constitutional CPN or CPU of a sample and that of the activatable CPN or CPU of the same sample, characterized in that wherein the hydrolysis activity of the sample on a sample withof the formula (I) is compared after bringing the sample into the presence of an activator buffer, if necessary for the time necessary to obtain activation of the carboxypeptidase U the activity of which is to be measured, then into the presence of a protease serine inhibitor, the observed hydrolysis activity being compared with the hydrolysis activity of the sample on a substrate withof the formula (I) in the absence of an activator buffer in accordance with claim 2112.
- 32. (currently amended) A method according to claim 21, <del>characterized in that</del> wherein the carboxypeptidase is a CPU.

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- 33. (currently amended) A method according to claim 32, <del>characterized in that</del> wherein the CPU is TAFI.
- 34. (currently amended) A method according to claim 28, <del>characterized in that</del> wherein the sample is treated in the presence and in the absence of a specific TAFI inhibitor.
- 35. (currently amended) A method according to claim 28, <del>characterized in that</del>wherein the specific TAFI inhibitor is CPI.
- 36. (original) A method for assaying activated TAFI in a blood sample, comprising the following steps:
  - a) bringing a first aliquot of the sample into contact with a specific TAFI inhibitor and treating it using the method defined in claim 28;
  - b) treating a second aliquot of the sample using the method of claim 28, in the absence of specific TAFI inhibitor;
  - c) measuring the  $\Delta$  OD between the first and second aliquot, representative of the activity of the activated TAFI in the sample.
- 37. (currently amended) A method according to claim 36 for differentiating between the activity of constitutional TAFI and that of activatable TAFI in the same sample, characterized in that the hydrolysis activity of a third aliquot of the sample is measured on a substrate with of the formula (I) in the absence of a buffer activator.
  - 38. (cancelled)
  - 39. (cancelled)
- 40. (previously presented) A kit for assaying the activity of a CPN or a CPU in a sample comprising a chromogenic substrate constituted by a compound according to claim 1.

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41. (currently amended) A kit for assaying the activity of TAFI in a biological sample, comprising:

a TAFI activator buffer; carboxypeptidase A; a substrate with of the formula (I) according to claim 1; and a TAFI inhibitor.